Earthquake prediction by several methods to observe direct emission from epicenter and measuring equipment

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Abstract

It is known that animal's anomalous action before huge earthquake (EQ here in after). Plants are found to have instinct to catch precursor from huge earthquake as well.

Plants show anomalous action sometimes, for example, *Mimosa Pudica* reacts when it is touched by hand, vent down before typhoon and anomalous action before EQ.

As mechanism of those anomalous behavior is not solved yet, possibility to predict the 3 elements of earthquake occurrence i.e. when, where and magnitude is very low, however, we can say that possibility to know occurrence of huge earthquake soon is very high.

In order to predict EQ occurrence with high probability, it is important to combine data obtained from several methods. We are trying to observe Tree Bio-electric Potential (TBP here in after), electric and magnetic (EM here in after) signal at several frequency band with adjacent dual frequency from VLF to UHF, aero ion and radon concentration, animal's anomalous behavior and Tidal level deviation as well.

We wait at various frequencies at VLF, LF, MF, VHF and UHF at adjacent dual frequency, if a signal received at only one frequency, it may not be seismic, it may be some signal which has some meaning, if two signals received at both frequencies simultaneously, it may be seismic signal.

Daily action of fishes and snakes are observed numbers to across optical sensor, mouse action is observed by rotation motion, cat action is observed number of steps by walking counter on neck.

Tidal level deviation is measured at 187 points along cost line by Japan Meteorological Agency (JMA) and other public organization. It is able to know deviation in sigma by software processing.

Best way to measure observed value is in Analog form, however, difficult to send to observation server through internet. We solved this problem by using a data processor which is very low cost and has high speed and max. 50 Channels input capability, in order to gather digital data format. As many observation posts are required for those direct emission observation, observation equipment should be low cost. We have already developed low cost EM digital observation system whose measuring unit is dBm and under development for ion and radon concentration equipment.

We will report some examples from which large EQ may be predictable for each method.

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